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In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (previously canceled)

21. (currently amended) A companion body fluid analyzing cartridge comprising:

2 a body having a top side and a bottom side; a base element, on said bottom side of said body, detachably being detachably connected to a side of an associated sensing cartridge

4 body, said associated sensing cartridge body that performs an analyzing operation on a body fluid, and has a liquid volume capacity of between 20 and 50 micro-liters,

6 a first port, on the bottom side of said body, being aligned with a fluid input port on said associated sensing cartridge body base element, aligned with a second port on the
8 companion body fluid analyzing cartridge body,

a first tube connected to said first port;

10 a fluid reservoir having a liquid volume capacity of between 50 and 500 micro-liters, connected to said first tube, said fluid reservoir containing a calibration fluid that is to be
12 provided to said associated sensing cartridge body via said first tube,

a waste fluid retrieval system for retrieving said fluid reservoir being reused as a
14 waste reservoir and being directly connected to a second tube that receives waste fluid directly from said associated sensing cartridge body via a second tube in said companion body fluid
16 analyzing cartridge after said calibration fluid is provided to said sensing cartridge body via said first tube.

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22. (previously presented) The companion body fluid analyzing cartridge
2 according to claim 21, wherein the companion cartridge detachably connects with said associated
sensing cartridge body by at least one of a fluid interface, a mechanical interface, and an
4 electrical interface.

23. (previously presented) The companion body fluid analyzing cartridge of claim
2 21, further comprising a reagent storage system comprising said fluid reservoir.

24. (previously presented) The companion body fluid analyzing cartridge of claim
2 21, further comprising a calibration fluid system comprising said fluid reservoir.

25. (currently amended) The companion body fluid analyzing cartridge of claim
2 24, further comprising a waste retrieval system that receives used calibration fluid, as said waste
fluid, from ~~connected to~~ the calibration fluid system.

26. (previously presented) The companion body fluid analyzing cartridge of claim
2 21, further comprising an assay element preparation system comprising said fluid reservoir.

27. (previously presented) The companion body fluid analyzing cartridge of claim
2 26, wherein the assay element preparation system includes one or more processes selected from
the group consisting of a blood chemistry process, a hematology process, an immuno-diagnostics
4 process, and a DNA testing process.

28. (previously presented) The companion body fluid analyzing cartridge of claim
2 26, wherein the assay element preparation system includes one or more operations selected from

the group consisting of a thermo cycling operation, an incubation operation, and an isolation operation.

29. (currently amended) The companion body fluid analyzing cartridge of claim 21, wherein the associated companion sensing cartridge body comprises a carrier fluid system connected to said fluid input port first port.

30. (currently amended) The companion body fluid analyzing cartridge of claim 29, wherein the carrier fluid system is programmed to increase at least a portion of the volume of an assay element.

31. (currently amended) The companion body fluid analyzing cartridge of claim 29, wherein the carrier fluid system is connected to [[a]] said waste retrieval system.

32. (currently amended) The companion body fluid analyzing cartridge of claim 29, further comprising an assay element, wherein the carrier calibration fluid remains essentially unmixed with the assay element.

33. (currently amended) The companion body fluid analyzing cartridge of claim 29, further comprising an assay element preparation system, wherein the carrier calibration fluid remains essentially unmixed with the assay element.

34. (currently amended) An analytical instrument comprising:

a companion body fluid analyzing cartridge body comprising:

a reagent storage system connected to a first tube, and

a waste retrieval system connected to a second tube, and

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~~a fluid reservoir, initially containing a calibration fluid, connected to said first tube and to said second tube; both said reagent storage system and said waste retrieval system comprising a same reusable fluid reservoir, said same reusable fluid reservoir being directly connected to said first tube for providing a reagent to said reagent storage system and being directly connected to said second tube for receiving waste fluid from said waste retrieval system; and~~

~~a sensor cartridge detachably connected to said companion fluid cartridge, said sensor cartridge receives said calibration fluid from said companion fluid cartridge via said first tube and provides a waste fluid to said second tube after a calibration process is performed, said waste fluid being deposited in said fluid reservoir via said second tube, and receives said reagent from said reagent storage system of said companion body fluid analyzing cartridge body, and providing waste fluid to the waste retrieval system on said companion body fluid analyzing cartridge body after said reagent is received by said sensor cartridge, wherein the sensor cartridge provides chemical analysis of an assay element, said sensor cartridge having a liquid volume capacity of between 20 and 50 micro-liters;~~

~~said companion body fluid analyzing cartridge body having a liquid volume capacity of between 50 and 500 micro-liters.~~

35. (currently amended) An analytical instrument comprising:

~~a companion fluid cartridge comprising: body fluid analyzing cartridge body comprising~~

~~a calibration fluid system directly connected to a first tube; and
a waste retrieval system directly connected to a second tube; and~~

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6 a fluid reservoir, initially containing a calibration fluid, connected
to said first tube and to said second tube; and, both said calibration
8 system and said waste retrieval system comprising a same reusable
fluid reservoir, said same reusable fluid reservoir being directly
10 connected to said first tube that provides a fluid to said calibration
system and being directly connected to said second tube that
12 receives waste fluid from said waste retrieval system, and

a sensor cartridge detachably connected to said companion fluid cartridge,

14 said sensor cartridge receives said calibration fluid from said companion fluid cartridge via said
first tube and calibrates an active area of said sensor cartridge, said sensor cartridge provides a
16 waste fluid to said second tube after said calibration process is performed to avoid interference of
said waste fluid with a measurement made at said active area of said sensor cartridge, said waste
18 fluid being deposited in said fluid reservoir via said second tube, and receiving said calibration
fluid from said calibration system on said companion body fluid analyzing cartridge, and
20 providing waste fluid to the waste retrieval system on said companion body fluid analyzing
cartridge body after said calibration fluid is received by said sensor cartridge, wherein the sensor
22 cartridge provides chemical analysis of an assay element, said sensor cartridge having a liquid
volume capacity of between 20 and 50 micro-liters;

24 said fluid reservoir companion body fluid analyzing cartridge body having
a liquid volume capacity of between 50 and 500 micro-liters.

36. (currently amended) An analytical instrument comprising:

2 a companion fluid cartridge comprising: body fluid analyzing cartridge

body comprising

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4 an assay element preparation system connected to a first tube, and
a waste retrieval system connected to a second tube; and
6 a fluid reservoir initially containing only an assay preparation
fluid, said fluid reservoir connected to said first tube and to said second tube, and, both
8 said assay element preparation system and said waste retrieval system comprising a same
multiuse fluid reservoir, said same multiuse fluid reservoir directly connected to said first
10 tube for providing a fluid to said assay element preparation system and directly connected
to said second tube for receiving a waste fluid from said waste retrieval system, and
12 a sensor cartridge comprising a regeneratable active element, said sensor
cartridge being detachably connected to said companion fluid cartridge, said sensor cartridge
14 being for receiving said assay preparation fluid from and ~~receiving said fluid from said same~~
~~multiuse fluid reservoir via said first tube, said assay preparation fluid being for regenerating~~
16 ~~said regeneratable active element, said assay preparation fluid turning into a waste fluid after~~
~~regenerating said regeneratable active element, said fluid reservoir being for receiving said waste~~
18 ~~fluid from said sensor cartridge via of said companion body fluid analyzing cartridge body, and~~
~~then providing waste fluid to said second tube, said regenerated active element being for use in a~~
20 ~~next fluid sample test. of said companion body fluid analyzing cartridge body, said waste fluid~~
~~being deposited in said same multiuse fluid reservoir, said sensor cartridge having a liquid~~
22 ~~volume capacity of less than between 20 and 50 micro liters, said companion body fluid~~
~~analyzing cartridge body having a liquid volume capacity of between 50 and 500 micro liters.~~

37. (cancel)

38.-43. (previously canceled)

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